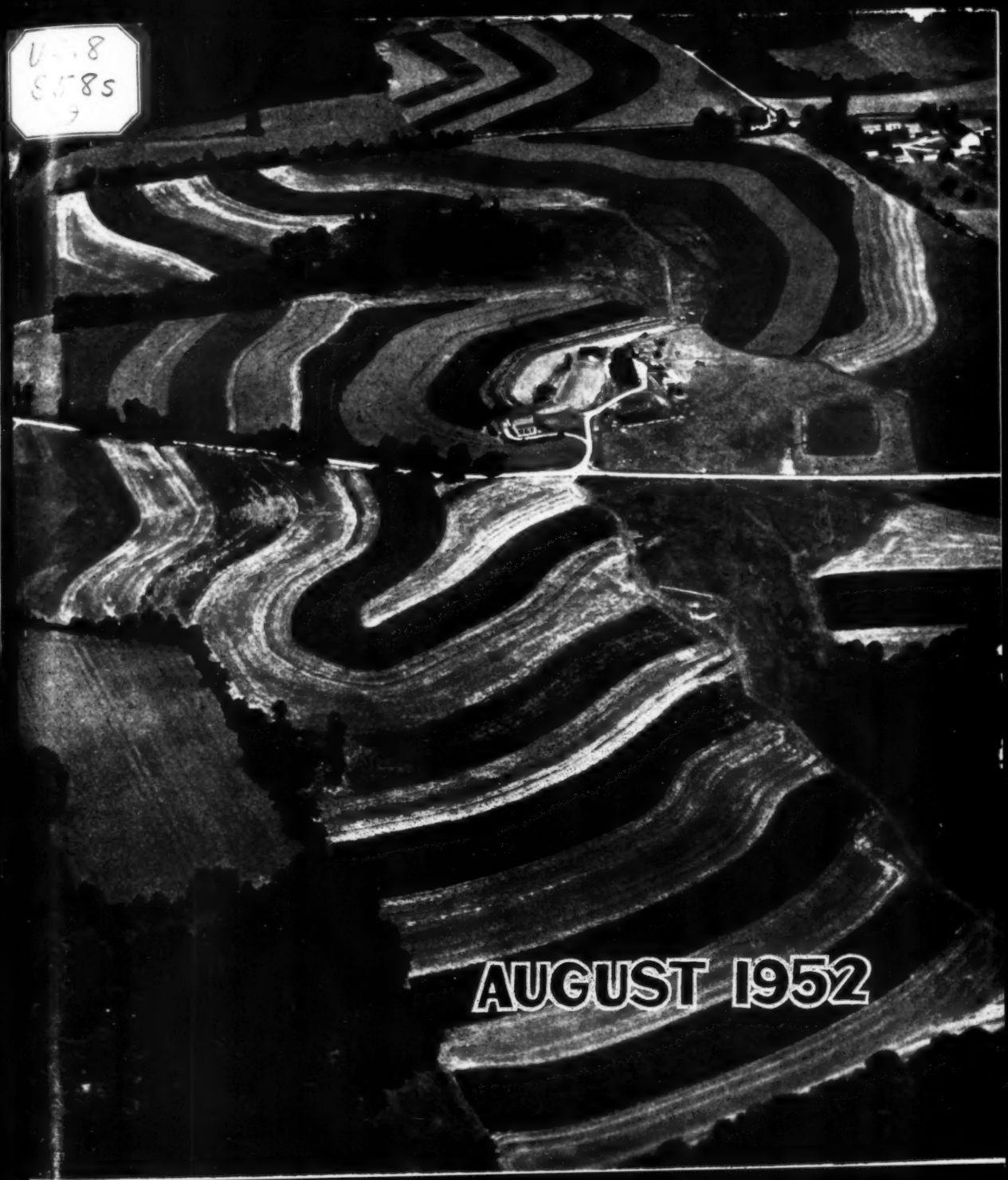

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SECRETARY OF AGRICULTURE

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★ THIS MONTH ★

WELLINGTON BRINK
Editor

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158 TONS OF RAINFALL.—At the end of a 36-hour period, the gage showed 1.4 inches of rainfall at the Gannett Farms, West Henrietta, N. Y., according to L. B. Skeffington, farm manager. This added up to more than 158 tons of water on each acre, Skeffington estimated.

"There was practically no erosion, or soil loss, thanks to our strip-cropping, cover crops, and sod waterways," he said. "We were able to hold back as much as 90 percent of the water, so it could sink into the soil and be useful in producing crops."

Without conservation practices, he estimates that the runoff would have been three or four times greater, not to mention gullying and loss of topsoil.

(Continued on page 19)

FRONT COVER.—A. R. Scheffler is a poultry and general farmer in Chester County, Pa. He has been a district cooperator since 1948. Out of a total of 152 acres in his farm, 88 are in strips. Scheffler has 13,600 feet of diversions, 4,000 feet of multiflora rose, 300 feet of tile drains—a fair index of the kind of farming he is doing so successfully. The fine air photograph is by Gordon S. Smith.

All orders go to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

CONSERVATION EDUCATION IN OUR SCHOOLS

By

GEORGE E. ROTTER

I LEARNED a lesson several years ago, one that I shall never forget. I was standing some 30 miles from the heart of New York City, in front of the doors that lead into the great building which was, at that time, the home of the United Nations.

It was a morning in March, and the sun shone brightly from a pure blue sky. Back of me, on a broad and spacious lawn, the flags of 60 nations floated gently in the breeze. A thrill swept through me at sight of our own Stars and Stripes waving among them, symbolizing the unity among world neighbors which we, like many other nations in the world, were trying to promote.

Mrs. Kring and County Superintendent W. C. Bloom review scrapbooks prepared in connection with a study unit in soil and water conservation.

Soon the workers of the Secretariat to the United Nations began to arrive. They came by bus and by automobile; they came by the hundreds. And as they filed up the broad walk and into the building, I could not help but realize that among them were representatives of the various races of mankind—the yellow, the brown, the black, the red, and the white. I could not help but realize, also, that among these hundreds of workers going into the building were representatives of all the religious faiths in the world, pagan and Christian. Represented, too, were people of 60 different nationalities.

Why do I mention this experience? Simply because here were peoples from the four winds of the earth, forgetting their differences in creed, culture, and nationality and coming together, under one roof, to work at a job of major importance, namely, the bringing of peace to the world. The analogy I want to draw is this: That whenever we are confronted with a

Mrs. Laverta Kring, teacher in a rural school in Dawson County, uses a salt map of a conservation-planned farm to point out practices to girls in her classes.

Note.—The author is supervisor of conservation education, Nebraska Department of Public Instruction, Lincoln, Nebr. This article was suggested by an address delivered at the last annual meeting of the Nebraska Division of the Izaak Walton League of America.

Randolph School fifth graders, with some of their potted plants grown in soils of various kinds and conditions. Left to right: Marcia McCallum, Clare Grasnick, Larry Hossack, Don Harmon, Carol Matcha, Patty Tatroe, and Bob Rauch.

problem which affects the welfare of all the people, we need, all of us, to forget personal and selfish interests and work together for a solution.

The problem of conserving our natural resources is one of basic importance and affects the welfare of all peoples just as the maintenance of peace in the world affects all peoples. It is because of this that the Nebraska Department of Public Instruction is striving to promote the kind of educational programs in our schools which will result in better conservation of our natural resources. We believe that if our schools are to meet the needs of twentieth century man, they must concern themselves with problems that threaten the welfare of his future. With a speed never before equaled in history, we are today making inroads on the world's natural-resource base that threaten to impair human welfare. School people and people in every walk of life must constantly be mindful of the fact that natural resources form the very foundation upon which the survival and advancement of any civilization depends. If we remember our history, we know that time and again people have risen to great heights as they made extravagant use of their resources. We know how civilizations petered out when their overindulgence in, and failure to maintain, life's sustaining natural resources caught up with them. It isn't in nature's books that people can draw heedlessly on its fund of exhaustible resources. There is a limit to such resources—a fact with which every school child in Nebraska, the Nation, and the world should become familiar.

Alarming as are the figures of resource waste and loss when they stand alone, they are even more so when viewed against certain facts of life. For example, only three centuries ago, the world's population was 400,000,000; the present population is 2,200,000,000. It is estimated that present population will double in about 70 or 90 years. The yearly gain is about 20,000,000; the daily gain, about 50,000. Population trends in America have likewise experienced a marked upsurge. During the period 1900 to 1950, the population increased approximately 100 percent. In the past 35 years it has increased 40 percent. During the past 5 years there has been an almost 6-percent increase. The tremendous increase in present-day population comes primarily from decreased mortality, resulting from developments in medical science.

So, the picture is this: Today we have depleted our soil resources dangerously. At the same time the population of the world is surging upward, human wants are multiplying, record-breaking developments in science and technology are making unparalleled demands on our natural resources, and the entire world is tensed under the threat of global war.

We cannot afford to let the facts and figures stun us into despair. They should, instead, incite a rally to improve the management of our resources. For as it has been well stated, the world is fast becoming "a sanctuary without exits for a fast-breeding human race." Today the habitable and cultivable areas of the world are for the most part occupied. The practices and methods which we called wasteful a few generations ago become suicidal today.

Our potentially productive cropland, *if properly cared for,* is enough to meet our basic needs for food and clothing, and our needs as regards industrial processes. But the warning is unmistakable; we cannot be complacent with our present wealth of resources. "Conservation," they say, "is everybody's business." It is up to the schools to make that statement stick.

Mrs. S. L. Oglesby, teacher, explains a chart to a class in the Huntington grade school, Lincoln, Nebr.

Because the Nebraska Department of Public Instruction has felt the great need for renewed emphasis in conservation education, it has within the past several years taken great pains to develop courses of study and resource materials for teachers. The problem has been rather extensively dealt with, particularly in our new science program and in our new social-studies guide for teachers. I had the rather pleasant experience of hearing a teacher from one of our

Judges of the second annual conservation-poster contest sponsored by the Lincoln Chapter of the Izaak Walton League of America in the rural elementary schools of Lancaster County, Nebr. Standing is Dr. Leo B. Shreve, past president of the chapter. Sitting, left to right, are D. E. Hutchinson, SCS district conservationist; Paul T. Gilbert, executive secretary, Nebraska Game, Forestation, and Parks Commission; Elva McFie, coordinator of art, Lincoln schools; Verdon Peterson, Lancaster County agricultural agent; Glenn Turner, Lancaster County Superintendent.

Nebraska schools comment at a recent meeting to the effect that he was surprised at the amount of work done by the department in fostering skills, attitudes, and understandings with reference to the conservation of natural resources.

But we admit that the job is not yet done well enough. In fact, jobs of such basic importance to the lives of people can never be done well enough. It is a matter of constant striving to improve upon our work. Accordingly, we have in mind a program for improvement which includes the following:

(1) We shall continuously revise our teacher guides in such a manner as to give teachers the best possible help in providing sound instruction in conservation.

(2) We shall, as we are now doing, channel to our teachers, not simply materials they themselves can use, but also materials which boys and girls from the kindergarten to the high school can use advantageously in the development of conservation skills and attitudes.

(3) We shall use, as we are doing, the teachers' newspaper in Nebraska, which is published by the Nebraska State Education Association. In this weekly newspaper, we shall strive to impress teachers with the importance of conservation education, and also provide procedures whereby the job can be done well.

(4) It is our plan, also, to encourage textbook publishers to give the matter of conservation education more adequate treatment. Although a number of textbooks have greatly improved in this respect, it is still disheartening to note inadequacies. I refer here, for example, to some of our history textbooks which may at times provide page upon page of reading materials with reference to events in history relatively insignificant in the lives of pupils today, but which fail to give adequate attention to the fact that civilizations have fallen to ruin because they neglected life's basic resources.

(5) One of the most important approaches we intend to make in the improvement of conservation education is that of working with our teacher-education institutions to the end that their programs give our prospective teachers suitable instruction in the conservation of our natural resources. It is folly to think that we will ever do justice to this phase of education if too many of our teachers, in both the elementary and secondary schools, fail to be impressed with the need for conservation and the methods whereby they may instill in our young people right thinking and right acting in this regard. In this respect I think it highly important to add that school people and lay people be particularly interested in having the highest type of personnel possible enter the teaching profession.

May I add, at this point, that the department's conservation would not be, in any sense, a restrictive or narrow one. Yes, we believe that it would concern conservation of the natural resources such as soil, water, minerals, and wildlife. But it must also include the conservation of human resources, specifically, the character of the individual. That should be the primary aim of all education, namely, the building of good citizens.

I am reminded here of the mother who approached me after I had talked to a parent-teacher gathering. She said to me, "Yes, the three R's are important, but I would infinitely prefer that the schools help my son Johnnie to become *a good boy* rather than teach him all the mathematics that Einstein knows." And then she added, "I believe that at times, education, from the grade schools to the colleges, develops our young people into adults who may soar among the stars intellectually, but, at the same time, does not give them enough of the guidance which is needed to keep them from groveling in the gutter morally."

Fortunately, we can, in our schools, help our young people gain a reasonable command of the skills and knowledges essential to intelligent citizenship, and at the same time, build in them wholesome character.

It is my feeling that sound conservation education can be of immense value in the development of moral and spiritual values in our boys and girls.

(1) Such a program can teach our young people the virtue of appreciating and respecting the property and rights of others. How important such behavior is when we think of the damage and destruction that is sometimes caused, for example, by hunters in the field.

(2) Sound conservation education can help our young people to realize the partnership which man has with nature, and develop in them the willingness to assume the responsibilities which this partnership involves. I know of no better way whereby a child in the schools can come to realize that he, a human being, is a product of creation, and meant to be a custodian of the land and other natural resources. And it follows, that a boy or a girl with this realization may also come to understand that he is subject to the natural laws.

(3) Wholesome conservation education is a natural avenue, also, for developing in our young people a firm purpose to preserve the land for the generations which will come to use it after they have departed from this world. Herein lies the development of the virtue of charity, which, when translated, means "an active concern for the welfare of others." I need not elaborate on this spiritual value; it takes little meditation on our part to realize that it does cover a multitude of sins.

In conclusion, let me state that since the will and the purpose to conserve our resources is born in the minds of men, our schools—the elementary, the high school, and the college—must make every effort to improve their conservation education programs. This must be done since no approach to the problem of wise use of natural resources will be durable and long-range unless it results in the development of an informed citizenry. Our young people must develop a sensitivity to the misuse of our resources. They must, moreover, acquire the needed knowledge upon which they may draw in seeking solutions to the problem of proper resource use and maintenance basically. The boys and girls in school today must develop self-discipline and so be willing to make choices in the light of social responsibilities rather than in terms of selfish gain, thus demonstrating an intelligent concern for the welfare of others. This quality, we would say, is of the very essence of the kind of living that is based upon principles of justice and charity. It is only through adherence to these principles that human, as well as natural, resources will be delivered from chaos.

DISTRICT PROFILE

THEODORE F. PEET
of
MINNESOTA

Theodore Peet.

Theodore F. Peet has just retired from the board of the Wilkin Soil Conservation District.

The man who said, "If you want a thing done on time ask the busiest man in town," must have been thinking of a man just like Theodore Peet. Since his graduation from the University of Minnesota in 1935, Ted taught vocational agriculture for 2 years, then began farming in 1938. Along with his other activities, he now operates a 640-acre farm and rents an additional 80 acres.

Peet was elected to the board of supervisors of the Wilkin Soil Conservation District when it was organized in 1944. He served as secretary-treasurer and helped to prepare the district work plan. He worked out the conservation plan for his own farm, using alfalfa-brome grass and clover in rotation with sugar beets and small grain. He has constructed about 4 miles of open drainage ditches of the latest flat-bottom and gentle side-slope design. He has planted 2 miles of field windbreaks to save moisture and stop soil blowing.

In 1946 Peet became interested in land leveling in connection with his drainage. He purchased a leveler and did the first work of this kind in his area. A demonstration of this new practice was held on his farm.

Peet has served on the State Soil Conservation Committee since his appointment in 1948 and will continue this activity. A State policy on soil conservation which he prepared was adopted by the committee. In 1949 he was a delegate to the meeting of the National Association of Soil Conservation Districts in Atlanta. He was appointed to serve on the Minnesota Water Advisory Committee in 1951.

Along with his activities, Ted has found time to serve as director in the Red River Valley Sugar Beet Growers Association, the Wolverton Co-op Elevator Association, and the Red River Valley Crops and Soils Association. He is also chairman of his local school board.

Ted is married and has four children.

—W. H. LATHROP

TIME SAVER.—A change in farm operators on cooperating farms makes extra work for field men assigned to districts. With new operators on 10 percent of the cooperating farms in the Crawford County (Wis.) Soil Conservation District this spring, Walter Raha, soil conservation aid, had to plan some way to save time. Walt believes he saves work by making an advance call to explain the farm plan to the new operator and encourage him to go along with the practices.

THE CONSERVATION OF PROPERTY

By WILLIAM H. APPEL

OWNERSHIP of property in determining land use has rarely held a place of sufficient importance in the minds of conservationists. With a growing population, pressures on land are greatly increasing, and while there is still an abundance of land in America it is being exploited at a heedless rate under the present pattern of private ownership. The ease with which agricultural land can be transformed into recreational areas, housing developments, and steel plants without any apparent awareness of the consequences on the part of real-estate agents, government officials, and business executives, is enough to dismay those of us who are concerned with conservation. If we are to do something about the wise use of our resources, we should ask ourselves what we can do to maintain and achieve the type of ownership of property that will best serve us.

To have a clear understanding of the implications of ownership, we must bear in mind that land is a fixed resource. Its site is permanent even though its productivity and value are as variable as the minds of men. While the question of values will always create differences of opinion, the land will continue to be "there." Since land is the one fixed resource, we are obliged to respect the wide range of its possible uses. Yet the law has successfully separated the ownership of land from the use of land. We know that owners must hold valid titles and pay taxes to retain their property. If these requisites are met, anyone can be an owner. The right to own property is unassailable, and ownership is protected by the registration of warranty deeds and titles. On the other hand, the law has been reluctant to regulate land use,

Note.—This article is reprinted, with illustrations added, from Vol. I, No. 1, of "Yale Conservation Studies," by special permission of the Yale Conservation Club.

It's all "property"—the safe, well-groomed farm and the land that has been made to suffer and lose strength.

although zoning regulations and eminent domain are steps in this direction. Social pressures have also resulted in restrictions, as when an industrial plant is enjoined by nearby residents from polluting the air with noxious gases. Notwithstanding, ownership of land in our society still connotes freedom of action. An owner can mine his land, sell his topsoil, dispose of entire gravel pits, or break up the unity of his plot by selling pieces to a number of purchasers. He can neglect his land and do nothing with it, or he can sell a fertile meadow to an open-air moving-picture syndicate, after which the bulldozer and gravel will complete the destruction.

In addition to his rights of ownership a man's privilege to do what he wants with his own property is heralded as one of the basic prerogatives of free men. By permitting the owner to determine with little check the disposition of his property, the courts have affirmed the economic laws of supply and demand. The policy may prove successful as long as there is an abundance of land, food, and employment, but there is no assurance that it will be compatible with the economic and social demands of the future when population pressures may be intensified.

Property is one of the most deceptive economic and social factors in our society because it can be assessed, bought, sold, and developed as if it had an exact monetary value. Competition for residential, commercial, industrial, and agricultural land creates artificial values. Undoubtedly most owners would agree that productivity is the most important single attribute of property. (A minority would stress esthetic qualities, but values based upon these sentiments become arbitrary and variable.) In many cases, however, individual rights are in opposition to the social needs of the group, and the monetary value of property should not conceal the intrinsic long-term value of land. The role of the conservationist is not to judge political ideologies but to promote a way of thinking above and beyond the right of a landowner to act "freely." On technical grounds the conservationist may question those economic values placed upon property that do not reflect social and individual integrity.

An owner who is considered a good conservationist because he observes accepted scientific practices can easily do things that will nullify much of his good work. Where the unity of a piece of property is broken up by sale, severe use restrictions may occur. The seller may not even recognize that the concept of property is as important as other patterns of conservation behavior. Nor does he realize the significance of "wise" ownership as part and parcel of "wise" use. When he sells, does he think as a land manager or as an entrepreneur? There is every indication that he thinks economically and in terms of immediate monetary gain. A healthy social and economic unit of land can be sadly destroyed by the hasty grantor.

Frequently when land changes hands, topography and geology are given a minimum of consideration. It is vain to argue that the economic laws of supply and demand and the needs of the community will force a healthy use of the land. There are too many instances that prove otherwise. What about the long, narrow holdings so characteristic of the property in French Canada where inheritance laws have sanctioned extreme subdivisions of property units? The small feudal farms of France, the postage-stamp holdings in India, and the geometrically precise farm divisions in most of the United States are all examples of the way in which cultural factors determine property size to the detriment of proper land use. While the trend is not always towards smaller and more uneconomic holdings, the examples do point to the increasing development of small inefficient land units in countries where population is increasing and culture is becoming more complex. The enclosure movement throughout England in the fourteenth century is an excellent example of how ownership practices led to social and economic inequities.

The character of a whole town can be changed by the sale of a large farm or estate. The economic and social welfare of any area can be subtly altered over a generation by the break-up of ownership units. In forested regions good silvicultural practices are made expensive and difficult where ownership is multiplied and dispersed. The value of forest resources disintegrates as acreage falls into the hands of more and more owners. This is true even when other values are introduced, such as when a camp or residence is built or a refuge set aside, when in reality the potential value of the timber may be of more economic and social importance to the community than a use that is more specialized. Respecting the boundaries of property held by established landowners is not necessarily a policy to protect the "haves" from the "have-nots." The policy should be to render land available for as many uses as possible.

Earlier we mentioned that the ease with which land can be converted into a monetary value makes its real worth deceptive. There is another characteristic factor of land use that blurs our understanding of its value. Unfortunately, the exploitation of land expands in one direction. We can easily visualize pasture land being converted into drive-in theaters, and potato fields being transformed into suburban dwellings. But is it as simple to tear down an industrial slum, grade it, and put it back into agricultural production? The cost of reclaiming land that has been appropriated for urban or industrial uses is prohibitive. A cellar hole in a potato field is different from a cellar hole in thin, stony soil. Land is like energy; once appropriated by man, some of the potential uses are lost permanently, and other uses can be regained only at great expense. Each unwise sale of land can be an additional loss in land-use potential. If the role of the conservationist is to slow down the wasteful dissipation of energy, then he must also concern himself with the manner of land disposal.

A constructive approach to landownership demands an understanding of some of the specific causes of the disintegration of property units. What prompts disharmony in land-use patterns? The pressures of increasing human needs and desires are at the base of this problem, but these pressures can take different forms. Urban residents who buy property in the country compete for it with local residents, who become less and less able to meet the rising costs. The only means of obtaining land is through the accumulation of capital, and the rural population finds it increasingly difficult to secure this capital.

The absentee landowner, like the resident owner, is generally guided by motives of personal gain and security. He is interested in the land for investment and recreation, but he differs materially from the resident owner in that he does not find his employment directly on the land or in the community where the land is located. For this reason, he tends to be less concerned than the resident owner with the maximum long-term health of his community. Since both kinds of owners are integral parts of our social and economic system, it is up to the conservationist to point out to each that holding land involves responsibility, and that here is one commodity that cannot be disposed of indiscriminately.

Leaders in conservation must not only consider land more fully in terms of its exchangeable character, but they must interpret their views to a wider segment of the public. It is questionable whether the real-estate manager is even aware that many of his present practices in dealing with the transfer of property are contrary to sound conservation practices. Appeals to the grantors, the grantees, and to dealers in real estate (so often the ones who set the stage for land transactions) have rarely been made. We speak of educating the industrialist as a first step in pollution control; if this is ineffective, we make laws to force him to comply. But because of the hallowed rights of the property owner, educational efforts are brushed aside with the comment that "it is not your business." Probably the planner is best equipped to take the first steps in persuasion toward achieving a desirable pattern of property ownership. At the other end of the scale is much-debated government control. Somewhere in between lies the role of the real-estate agent who can be educated in the principles of conservation and who, like the soil technician, can assist individual owners in buying, selling, and managing their property in more productive and socially desirable fashion. He is in a position to interpret values which reach beyond pure economics. The real-estate agent is clearly involved in the task of minimizing the destruction of healthy property units which can lead to poor social and economic conditions.

Troop 6 exhibit at Augusta, Ga.

SCOUTS BUSY.—Boy Scouts, focusing attention on Conservation Merit Badges with customary energy and enthusiasm, have been active in many sections of the Southeast recently.

Conservation was the outstanding theme at three meetings in Charleston, S. C., where J. E. McDonald, soil scientist and active leader in Scouting, helped to put on a good conservation show.

At Spartanburg McDonald and others arranged exhibits, showings of conservation movies, and publications for a program for Scout leaders, preparatory to the promotion of conservation as the month's theme of Scouting.

Displays were also used at the annual meeting of the Order of the Arrow, the honorary camping fraternity for Boy Scouts in Charleston, and again for the merit-badge show there. The latter featured exhibits and demonstrations of 36 merit badges and was attended by more than 3,000 persons.

Included in the exhibits were clearly labeled sods of various grasses and legumes. One "city farmer" after seeing Coastal Bermuda-grass on display, went home and telephoned an SCS technician in an adjoining county about getting some of the grass for his farm.

In Mississippi, as a part of the Program for Greater Service, soil conservation district commissioners set up prizes totaling $400 for five contests, including a Boy Scout Merit Badge contest.

As a result of the contest, 158 merit badges in conservation, forestry, and wildlife management were awarded to Scouts of four troops in the Rosemary Pine Scout District. First prize of $20 went to the Liberty troop, second prize of $15 to the Crosby troop, third prize of $10 to the Centreville troop, and fourth prize of $5 to the Gloster troop.

In Georgia, the Augusta Rotary Club sponsored a Boy Scout Merit Badge show. The conservation exhibit included a model farm before-and-after plan, a tree-planting demonstration, and displays of quail, pheasants, and fish used in stocking farm ponds.

GEORGIA'S GOVERNOR FARMS THE CONSERVATION WAY

By JULE G. LIDDELL

Some years ago we began to publish articles, as we could round them up, featuring the conservation ideas of various key officials of State and Nation. Two of these articles were by former governors of South Dakota and Louisiana.

Falling naturally into this series is the following simple and intimate account of the farm which is the pride and joy of District Cooperator Herman Talmadge and his land-loving family. Georgia's Chief Executive will complete his term of office in 1954.

—THE EDITOR

PINE TREES, grazing crops, and dairy cattle lined the graveled road from the plantation entrance near Lovejoy to the stately, columned Southern home, which we reached at 7 o'clock of a cloudy summer Saturday morning. Two minutes later, a big car with Georgia license plate No. 1 rolled in through the barnyard from a back pasture.

From the car stepped a tall, dark-eyed young man in blue overalls, heavy work shoes, and shirt open at the neck. It was Georgia's Governor Herman Talmadge, dairyman and soil conservation farmer.

Breakfast with the Governor at his plantation home was a happy combination of Southern cooking and down-to-earth talk about soil conservation, fescue, sericea, kudzu, Ladino clover, reseeding crimson clover, silage, cows, pine trees, and soil conservation districts. It was clear that Georgia's first citizen knows conservation farming, and likes it.

Note.—The author is State conservationist for the Soil Conservation Service, Athens, Ga.

His sons were with us: Robert Shingler, 5, named for his mother's people, a pioneer family of Ashburn, Ga., who did extensive farming in that area; and Herman Eugene, Jr., 8, called Gene, for his governor-grandfather.

Good pasture and good cattle on the Forsyth farm.

This is the 48-acre Twelve Oaks Lake, where the public may fish for a small fee.

No soil washing but a lot of soil building. The Governor examines annual lespedeza which follows small grain on his farm.

After breakfast, Dairyman H. D. Thames, a supervisor of the Upper Ocmulgee Soil Conservation District, and SCS Technician T. W. Cole joined us.

Our schedule, the Governor explained, would be to spend the morning on his 1,700-acre dairy- and beef-cattle farm near Forsyth, return to the plantation house for lunch, and then study soil conservation and livestock farming on the 2,500-acre Lovejoy place that afternoon.

To brief us, Governor Talmadge brought out an aerial photograph showing the land capabilities of the Lovejoy plantation. The Governor pointed out what we would see: Sericea lespedeza or kudzu on Class IV land. Fescue, orchardgrass, and Ladino clover on wet bottom land and some of the better upland. Corn and other silage crops on Class II and III land. Protected and selectively cut pine trees on land best suited to them. Wildlife plantings of bicolor lespedeza. Farm and fish ponds, and the 48-acre Twelve Oaks Lake where the public may fish for a small fee. An irrigation system to

Taking a look at the power plant and pump of the irrigation system designed to keep 100 acres of improved pastures green through spring and summer droughts.

water 100 acres of improved pasture during dry weather. (In short, the complete-farm soil and water conservation plan any farm owner can make with help from his district and the SCS.) We also would see two Grade A dairy barns, two dairy herds, and the commercial beef herd.

Except for the time at lunch with Governor and Mrs. Talmadge, we spent the next 8 hours trying to see all his soil conservation work.

Herman Talmadge was interested in better farming and better land use before he was elected to the No. 1 job in Georgia.

"Before I got to be Governor," he chuckled, "some folks thought I must be on the Soil Conservation Service pay roll. Of course I wasn't, but every time I made a speech, I talked about soil conservation and how important it is."

Each year, beginning with 1949, Georgia has observed Soil Conservation Week in September by his proclamation. The participation has included every group and every organization in the State.

Since his administration began, a major change was made in the State Soil Conservation Districts Law. Originally, the law set up a State Soil Conservation Committee composed of agricultural agency heads. As amended, the law provides for a five-member State Soil Conservation Committee composed of five supervisors of soil conservation districts. They are appointed by the Governor, and the agency heads are advisory members.

Governor Talmadge made a deep impression with his address at the annual convention of the National Association of Soil Conservation Districts in Atlanta in 1950.

The Governor learned about districts by being a cooperator carrying out complete conservation plans. His Lovejoy farm is in the Upper Ocmulgee district; his Forsyth farm is in the Towaliga district. He also learned about districts by working with district supervisors.

"I know practically every soil conservation district supervisor in the State, and I've attended every one of their State meetings during the last few years," he said. "I'm interested in districts as a State official and as a farmer who needs their help in solving erosion and land-use problems.

"Soil conservation districts are agencies of the State of Georgia. I believe that the elected supervisors of these districts are best qualified to determine exactly the kind of soil conservation programs they and their neighbor farmers need and want. That keeps the soil conservation program right down at the grass roots where it belongs. I also think that the Federal Government ought to contribute to the preservation of the natural resources on which all of us depend, and that technical help such as the United States Soil Conservation Service gives should be channeled through these local districts as it is to help farmers in the districts to carry out their own conservation work. The conservation farm plan with districts should be the basis for all agricultural programs."

To the Governor, "increased yields and increased incomes are the best arguments that I know for soil conservation. But soil conservation means even more than that to me; it means that I am building a better farm for my children."

Some of the land farmed by Governor Talmadge has been in the family nearly 150 years, dating from the ownership of his great-great-grandfather, Aaron Talmadge.

And the two Talmadge boys are growing up with a love of farm life. It was young Gene who, during his father's last election, said, "I hope you don't get elected, so we can stay on the farm all the time." A majority of the Georgia voters disagreed with him, but the Talmadges spend every possible week end on the land.

All during our trip over the two farms, Governor Talmadge and District Supervisor Thames compared personal experiences on farming. Their conversation went like this:

Governor: "I planted 1½ acres of bottom land in Louisiana white clover and fescue, and the fescue in 7-inch drills crowded out the clover."

Thames: "I like the fescue better in 14-inch drills."

Governor: "That's the way I'm going to plant it with clover from here on out; stop up every other spout of the drill and put it in 14-inch drills."

Thames and the Governor discuss silage yields out in the tall corn.

Going over his farm conservation plan, the Governor is flanked by his sons, Robert Shingler and Herman Eugene, Jr., Technician T. W. Cole, and (right) H. D. Thames, supervisor of the Upper Ocmulgee Soil Conservation District.

And there was the customary rivalry between good farmers:

Thames: "I've got plenty of silage corn 12 feet high."

Governor: "I've got it 15 feet high." (And we later saw some of it, too.)

When they turned to hay crops, the Governor and Dairyman Thames saw eye to eye on sericea and kudzu.

"Our country is better adapted to sericea than alfalfa, and if you cut sericea at the right stage, it makes hay just as good, I think," Farmer Talmadge said. "It costs $100 to put in an acre of alfalfa and $25 to $30 a year to maintain it. You can put in an acre of sericea for $20 and maintain it for $10 a year. You can expect 2 to 2½ tons of hay an acre from sericea, plus a possible seed crop, plus a place to overseed fescue or crimson clover, plus a job of land building just as good as alfalfa can do.

"And sericea is easy to handle as a hay crop," he added. "You wait until it's 12 or 14 inches high. Cut it in the morning. Windrow it after dinner. And bale it late that afternoon."

While we rode through a 486-acre pasture, the Governor gave us his winning combination for paying pasture sod: First, the right plants on the right land; second, fertilizer and lime;

(Continued on page 19)

WATER PAINTS THE RANGE GREEN

Red cattle on green grass—Heaton's dream come true.

By EARL B. SPENDLOVE

RED cattle grazing on green grass is a beautiful sight to Charles C. Heaton of Moccasin, Ariz., a man who has spent most of his life running livestock on the scorched ranges of the Arizona strip, that portion of the State between the Grand Canyon and the Utah State line.

During the 56 years that Heaton has been raising cattle, there have been many seasons when he saw the feed burn and watering places dry up or become so strong with alkali that the stock would not drink. During times like these, he thought of what it would be like to see cattle standing knee-deep in green grass with plenty of water close by.

The ranges were producing less and less feed, and because of continued cuts on his grazing allotment on the Public Domain, Heaton was faced with the choice of obtaining more land or getting out of the cattle business.

Heaton and his sons, Grant and Kelly, started looking around. They found what they wanted a few miles north of Glendale, Utah. Below the colorful pink cliffs that are part of the same formation as Bryce Canyon National Park was a ranch of about 500 acres that was for sale. Most of the range was covered with mountain brush, but in the bottom of the main canyon was a small stream of water. Although the little stream had cut a fairly deep gully and lowered the water table on adjacent meadowland until it was producing mostly brush and weeds, it was this flow of cold clear water that sold the Heatons on the place. They knew the wonders water could work when properly handled.

After they purchased the ranch in June 1945, the father and sons began to think about the unsightly gully. Not only had it lowered the water table on meadowland, but it was difficult to cross and was an eyesore to the ranch. In trying to determine what could be done about the gully, the Heatons contacted Charlie Davies, who at the time was the Soil Conservation Service representative working with the Kane County Soil Conservation District. Together, they went over the ranch and worked out a conservation plan which included range and pasture seeding, deferred and rotation grazing, and, of course, the control of the gully.

The gully wasn't such a problem after all. A lot of willows and birch were growing along the stream, so Davies suggested to the Heatons that they see what beavers would do. Through efforts of the Kane County district, they were

Note.—The author is soil conservationist, Soil Conservation Service, Kanab, Utah.

able to get eight beavers. These were turned loose along the stream in August 1946. Results have been astonishing. Since 1946 the beavers have built so many dams in the stream that the water table has been materially raised, floods and erosion have been reduced, and fishing has improved. The beavers have spread to nearby streams where they are building more dams.

The Heatons have constructed ditches and diverted water from the creek in several places, and now have irrigated pasture on land which was formerly covered with brush and trees. The irrigated pasture and meadow have been fenced so the newly seeded grasses are protected. After the grasses are firmly established these same fences are used in carrying out rotation grazing. They have built a small pond which is stocked with fish for their own use, and now are working on range reseeding.

The range-improvement program was started in 1950 when they sold some timber on the ranch to a local sawmill. Logging operations left some bare spots, so the Heatons, in cooperation with the Kane County Soil Conservation District, seeded one of the areas to a grass-legume mixture in the fall of 1950. The summer of 1951 was very dry until late August. Despite this fact, some of the grasses, such as tall, intermediate, stiff-hair, and crested wheatgrasses; sand and weeping lovegrasses; sweet clover; and Russian wild-rye made excellent stands. So pleased were the Heatons that in the fall of 1951 they planted grasses on other bare areas, and also cleared and seeded additional land in the canyon bottoms.

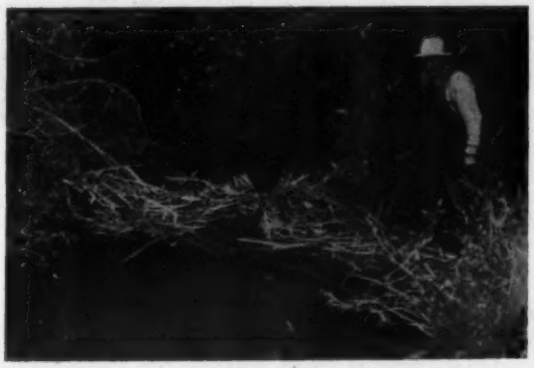
While the Heatons have been improving their land, they also have been improving their livestock. When they bought the ranch they went to purebred Herefords. A good bull and repeated culling have resulted in one of the best herds in southern Utah and northern Arizona.

Heaton calves won first and second places in the fat-cattle class at the Kane County Fair in 1951, and also took blue ribbons in the fat-cattle class in the junior division of the Southern Utah Livestock Show at Cedar City. These prize-winning animals are part of the stock that Heaton has sold to FFA and 4-H Club boys and girls. In order to encourage youngsters in these organizations, Heaton lets them have their pick of his purebred steer calves for the same price per pound that he gets from his regular calves in the fall.

The Heatons estimate that they have increased their income by about one-third since they bought the ranch in 1945.

The elder Heaton is a real conservationist, and the sons are following in his footsteps. He has served on the board of supervisors of the Pipe Springs Soil Conservation District in northern Arizona for 6 years, and his son, Grant, now is a member of the board.

The Heatons' operations are typical of those in this area in that they spend the summers on the ranch in the mountains of Utah, and the winters at the lower elevations in Arizona. In addition to their 500-acre ranch in Utah, they have a grazing permit on the adjoining Dixie National Forest, and also own ranch land in northern Arizona.



The elder Heaton surveys one of the beaver dams.

DEPARTMENT AWARDS.—At the annual awards ceremony of the Department of Agriculture in May the top honor—the Distinguished Service Award—went to Dr. Robt. M. Salter, Chief of the Soil Conservation Service.

Winners of the Superior Service Award among employees of the Service included: Adrian Fox, Karl Harris, William L. Heard, Robert E. Briola, and Leo P. Arnold.

Superior Service Awards also were won by the Shattuck, Okla., work unit; the Belmont, N. Y., work unit; and the Pleasanton, Calif., nursery unit.

The awards carry with them official citations for achievement and handsome medals appropriately engraved.

SOIL SCIENCE INVOKED BY ARMY AIR FORCE

By R. H. MUSSER

Irwin and Walter J. Mueller, cooperator in the Shiloh-O'Fallon Soil Conservation District.

A GOOD soils man recently saved $30,000 for the Army Air Force—and the taxpayer. It took Raymond R. Irwin, work unit conservationist at Belleville, Ill., only half a day to do the job, a record for saving public money at the rate of $7,500 an hour.

Irwin, who is farm planner for the Shiloh-O'Fallon Soil Conservation District, was about to leave for the field one morning several months ago when a telephone call came from Hugo Schneider, resident engineer for the Corps of Engineers, Chicago district. Schneider was in charge of a construction job at Scott Air Force Base.

"He asked if I knew anything about soils," Irwin recalls. "I told him I had training and experience as a soil scientist. He wanted me to come to the Scott base immediately because his problem involved a lot of money and he thought it important enough to warrant my time. I dug up my soil auger and they sent a car for me in a few minutes."

Irwin found his problem centered around a runway extension where grading was just starting. The Army had been advised that it would have to excavate to a depth of 4½ feet to arrive at solid footing. The soil already there was not thought suitable for compaction. It was planned to haul dirt from a borrow pit several miles away and fill in the fresh excavation up to ground level; the concrete runway could then be raised above ground level to take care of surface drainage. But this system would be prohibitive.

Irwin went to work with his auger and within a few hours had proved there was nothing wrong with the existing subsoil. It was entirely suitable for compaction, a fact which subsequent tests by Army engineers proved correct.

So the excavation was for 18 inches instead of 4½ feet down to good, firm subsoil. At

Note.—The author is regional director, Soil Conservation Service, Milwaukee, Wis.

Irwin's suggestion, the Army constructed drainage ditches for the landing area and took the subsoil from these to fill in the runway excavation.

Even the topsoil from runways and drainage ditches was saved. The Army used it to develop a large grassed runway extension which will safeguard planes that might overshoot the concrete.

No borrow pit was needed, and the only earth moving was in the immediate construction area. The Army estimated its saving at $30,000.

This is not the first time, however, that the Army has made use of the best facilities available to keep down costs. Nor is it the first time the Soil Conservation Service has made a substantial and direct contribution to national defense.

Late last year Irwin was asked by Captain Carl Lowry of Air Installations to lend a hand in developing a soil conservation program for Turkey Hill. One squadron is located on this 40-acre tract near Belleville and it is the highest ground in that entire area.

The hill was freshly graded and because of steep slopes severe erosion was taking place. Runoff was high because so much of the hill had been covered by roads and buildings.

At Irwin's suggestion, the Army asked the district for assistance and became a district cooperator. Service technicians ran surveys and prepared engineering drawings. The cure is a system of diversion terraces which will drain into a concrete tube and riser. The entire area will be put in grass. The work will be done by contract and under SCS technical supervision.

The directors of the district—oldest in Illinois—were glad to enroll the Army Air Force as a cooperator. Army, Service, and district are all engaged in the job of defending the same democracy.

GEORGIA'S GOVERNOR

(Continued from page 15)

third, water; and fourth, liberal use of mowing machines.

"I've been putting everything I can rake and scrape into these two farms," Governor Talmadge said. "I've already spent more than $25,000 for seed and fertilizer. Both places are now making some profit, and I hope to make each one gross $40,000 a year. I figure that operating costs will be about $25,000 a year on each place, and that will mean $15,000 a year net."

He believes that the best combination for his farms, and others in the Piedmont section of Georgia, is pasture, cattle, feed crops, and pine trees. He has 2,700 acres in woods and 1,500 acres of open land on the two farms, and no cotton. His open land is in grasses and legumes or in silage crops.

Livestock farming, the Governor believes, is "a lifetime proposition; you have to grow into it." He started dairying in 1949 on each farm, has registered and grade Jerseys, Guernseys, and Holsteins that made Dairyman Thames, a veteran in the business, exclaim with pleasure. He has 250 cattle on each farm. All bulls, both dairy- and beef-type, are registered.

"If a dairy cow fails to measure up to what we expect of her," the Governor said, "she goes into the beef herd, which is a mixture of dairy- and beef-type cattle with registered beef bulls."

While we were with the Governor, he gave detailed instructions to his two farm managers, Grover Wall, 28-year-old war veteran and former 4-H Club member; and D. J. Pitman, who has a half interest in the beef herd.

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158 TONS OF RAINFALL

(Continued from page 2)

The importance of having this rainfall in the soil is emphasized by Arthur J. Pratt, vegetable crop specialist at Cornell University, who says almost any crop that covers the ground on July 1 can be expected to use 10 to 15 inches of water during July and August. This means from 1,130 to 1,765 tons of water per acre needed in 60 days at that time of year.

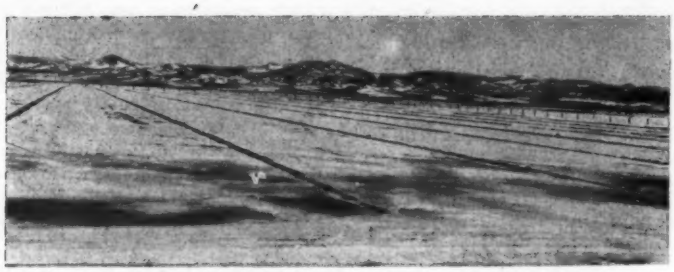
FAITHFUL SERVICE—Ten-year service records are nothing unusual among SCS personnel. But when Willie P. Paschal, of Paducah, Ky., completed 10 years as a laborer at the Paducah Nursery, Nursery Manager Walter Guernsey thought that this deserved some special recognition. It took the form of a letter in which Guernsey wrote:

"It gives me a great deal of pleasure to inform you that on April 13, 1952 you completed 10 years of service at this nursery with the Soil Conservation Service.

"You are the only one remaining of the many men we hired at that time.

"During those 10 years we have had every reason to be glad we hired you. Your services have been most satisfactory and you have been most faithful and honest.

"We, the staff of this nursery, congratulate you on your record, and hope that you have many more years just like those completed."



Borders show where snow has melted. Cooper has benefited amazingly from leveling his land to get more efficient use of water.

EXPERT USE OF WATER TRIPLED YIELD

By VIRGIL S. BECK

"I GOT my first ideas on what we now know as conservation farming from a neighbor farmer long before we ever knew anything about a soil and water conservation program in this part of the country," says S. Vern Cooper, who is farming 320 acres about 5 miles northwest of Center, Colo.

This neighbor farmer, Cooper recalls, was A. J. Smith, an old Dutchman who came to the San Luis Valley from Kansas and moved away several years ago.

"Only a fence divided our farms, and I used to stand there and look at his land and then at mine," Cooper says. "It all looked about the same to me. I figured that there couldn't be much difference in the soil on our adjacent farms, and I didn't have any more rocks than Smith. Yet he was getting around 300 sacks of potatoes per acre, while the best I could grow was 100.

"Finally, I asked Smith how he did it. He told me that his success came of keeping his land as level as possible for proper irrigation. In those days we leveled by eyesight, knocking off the high spots and filling in the low places so it would be easier to get water fairly even over the field. I figured that if land leveling was responsible for giving Smith a potato crop three times mine, I'd better try it."

Cooper already was acquainted with rough leveling. He quit railroading at Casper, Wyo., and moved to Center in 1922. He rented a farm for 5 years and grew potatoes, grain, peas, and hogs.

In 1927 he bought 160 acres of his present farm, of which only 85 or 90 acres were in cultivation, and less than 25 acres of this really was producing crops. The rest was always either too wet or too dry. In trying to irrigate, Cooper found that the low spots got too much water and crops were drowned out, while he couldn't get enough water on the high areas. That's when he started rough leveling, knocking off high spots and filling in low ones.

Cooper bought his second 160 acres in 1938, and continued rough leveling to try to boost his crop yields. When the Center Soil Conservation District was organized in 1944, he was elected vice president and was among the first cooperators.

He started leveling by survey in 1946 and now has completed this phase of his soil and water conservation program which he worked out with SCS technicians. New irrigation ditches were installed as the land was leveled and the entire farm has been subsoiled for

Note.—The author is in the information division, Soil Conservation Service, Albuquerque, N. Mex.

better water penetration. Cooper subsoils a field before planting to potatoes, and planes it after a potato crop to keep the land as level as possible.

In order to maintain and build up fertility, Cooper spreads all available barnyard manure and also uses commercial fertilizer. He scatters straw where cuts are made in leveling, disks under the straw, and then applies fertilizer to build up humus.

Before Cooper finish-leveled his farm he was getting about 100 sacks of potatoes per acre. In 1951, immediately after the field had been leveled, without fertilization, and in a year short of water, he harvested 268 sacks of potatoes per acre. On 2 acres on which liquid fertilizer had been used, he got 36 bales of alfalfa hay to the acre in one cutting.

Cooper is carrying on an 8-year crop rotation. A field is planted to alfalfa 3 years for hay production. Intermediate wheatgrass then is drilled in the alfalfa and the field is pastured 3 years. Then it is subsoiled and planted to potatoes. After the crop is harvested, the field is planed to keep it level, and seeded to alfalfa with grain as a nurse crop.

In carrying out his crop rotation, Cooper keeps 120 acres in alfalfa, 120 acres in alfalfa and grass for pasture, 40 acres in potatoes, and 40 acres in new alfalfa and grain as a nurse crop.

Cooper uses all feed grown on his farm for his sheep. He drilled a well for supplemental irrigation in 1946, but has found himself short of feed during recent years of water shortages. He has been running about 680 head of sheep but has had to rent pasture when water was short. He now has reduced his flock to 400 ewes in keeping with the feed he can produce on his own land. As soon as he can build up his feed production, he plans to plow under his last crop of alfalfa as a green-manure crop to add organic matter and to improve fertility. This year he was only four lambs short of a 200-percent crop.

Cooper at his irrigation well.

Cooper is president of his district. At left is Will Harmon, secretary, and at right, R. E. Finley, member.

He has been a leader in the Center Soil Conservation District since the district was organized in 1944, and has served as district president since 1946. He has attended the conventions of the National Association of Soil Conservation Districts in Denver, Atlanta, Oklahoma City, and Cleveland within the last 4 years and is a member of the finance committee of the Colorado Soil Conservation Districts Association.

Charles H. J. Breeding.

TO DIRECT STRIP-MINE RECLAMATION.—Charles H. J. Breeding, formerly of the Soil Conservation Service in New Hampshire, has been retained by the Ohio Reclamation Association to head up its activities in reclaiming strip-mine lands.

Breeding will be assisted by Charlie MacIntire, assistant field director, and by Eddie Kohl, Roe Cochran, and Royce Crosby, field representatives.

The Ohio Reclamation Association is an organization of 115 strip-mine operators engaged in actual reclamation of strip-mine lands. Since its organization in 1945 it has returned over 16,000 acres of this land to productivity in pastures, timber production, orchards, and recreation areas.

BEACH EROSION POSES PROBLEM.—Wind and high water along the east shore of Lake Michigan have teamed up for a savage attack on summer homes and industrial property in what may be only a preview of greater damage to come.

Especially hard hit is an area northwest of Ludington where, attracted by fine beaches, many residents of Illinois and Michigan have built summer homes. The State road to this area passes along Lake Michigan and continues to State Park and Big Point Sable light. In the fall of 1951, the level of Lake Michigan rose considerably. The waves covered the beach and soon large areas along the State road began to vanish as the winter storms hurled the high waves against the banks. Broken cement and paving blocks used to protect the beach proved ineffective. In the spring of 1952, large numbers of tree trunks and roots from a highway-widening project and from old orchards were dumped in as protective fill. But the beach is still eroding and the road may soon be out of use.

At Epworth Heights, a colony of summer homes north of Ludington on the shores of Lake Michigan, foundations are being exposed, supports washed out, and walks undermined. Exposed water mains and sewage lines make weird patterns.

Commercial interests, too, have suffered in the wild beating of the lake. A pipe line belonging to the Dow Chemical Co. had to be moved.

Even the distant past has been violated by the rising waters. The remains of an old ship has aroused much conjecture from passing motorists.

How to cope with beach erosion is not clear. Protective devices along the beach may be of some help but the situation will probably exist until the lake falls to its normal level.

—Robert J. Amsterburg, Jr.

Typical of the neighborhood conservation meetings held on blustery winter nights in New England was this one in the 250-year-old farmhouse of G. Allen Huggins, in the Strafford County Soil Conservation District, Dover, N. H. Now, in the busy crop season, dividends are being realized. Standing is Robert E. Laramy, district conservationist. Seated, from the left, are Mrs. G. Allen Huggins, Roscoe Simpson, Robert Simpson, Leon Watson, Hugh Tuttle, and Mrs. Sumner Foss.

WHAT'S THE CAPABILITY?—R. E. Burton, of Dooly County, Ga., supervisor of the Ocmulgee Soil Conservation District, told this story at a supervisors meeting. He asked a friend of his, who is a real-estate salesman, what progress he was making in disposing of a certain large estate. The friend replied that he had advertised it well and had had a number of inquiries, but that all of the prospects wanted to know about the land capability. This caught the salesman completely off guard. He later told Burton, "I believe I'm going to have to go back to college and study soil conservation, if I'm going to maintain my reputation as a good salesman for farm real estate."

NOTES FROM THE DISTRICTS

FARM PLAN IN JAPANESE.—A Soil Conservation Service technician working with the West Oahu (T. H.) Soil Conservation District achieved a modest distinction recently when he helped prepare the first conservation farm plan ever written in the Japanese language.

CONSERVATION PLAN
保存方案

K. NAKAMA

1. Construct diversion ditches and vegetate (with bahia grass, if available. Otherwise, use manjnia or kikuyu grass).
上から流水来る水を逆らす為、畑の上手に溝を掘り、それに草を植込む事。(草は得らればバヒア得うざれはマニニア又はキクユを使用する)。

2. Construct terraces broad and shallow and have them discharge into the vegetated hillside. Stagger the discharge outlets.
壇を浅くて廣く築きそれを草木の生えている荒地に排水し排口を四散する事。

3. At the end of a growing cycle, use the pineapple plants for mulch.
パイナップルの作を終へるとその木を覆蓋として利用する事。

4. Plant cover crop between pineapple cycles. Use suitable crops such as pigeon peas or purple vetch. Turn under as green manure.
パイナップルの作期を終へて次の作を植える前に間作を作る事。之に適した作物、即ち鳩豆、又は紫えんどうを作る之を切込んで緑色肥料とする。

5. Use the broad terraces as farm roads.
廣い壇を農路として利用する事。

6. Plant pineapples on the contour.
パイナップルを等高線に傳はって作る事。

7. Put in vegetated drainage ditch.
排水溝を掘りそれに草を植込む事。

GLOSSARY
語解

TERRACE
壇ダン - 耕地を横切にした溝の如き物。

MULCH
覆フク蓋ガイ - 地面に布地して植物の根を保護する物料(藁、鋸屑、木葉)。

COVER CROP
間カン作サク - 冬季には地を保護し春の耕転期に切込みて肥料にする作物。(布哇に於ては雨の多い冬季の事を云ふ)。

FARM PLAN IN JAPANESE.—A Soil Conservation Service technician working with the West Oahu (T. H.) Soil Conservation District achieved a modest distinction recently when he helped prepare the first conservation farm plan ever written in the Japanese language.

The assignment was an "extra" one for Herbert Yanamura, SCS soil scientist. He proved himself fully capable of carrying it out, however. A veteran of World War II, Yanamura received special training in the oriental languages at an Army Intelligence school on the mainland and later was sent to the Philippines where he interviewed enemy prisoners of war.

The plan was translated at the request of Kazuo Nakama, an American of Japanese ancestry who raises pineapples on the windward slope of the Waianae Mountains near Waipahu, Oahu. From the Nakama farm, looking southward, you can see across many miles of the blue Pacific Ocean.

District Cooperator Nakama is enthusiastic about his farm plan and has started to carry it out by planting 5 acres of pineapples on the contour.

After completing his work on the Nakama project, Herbert Yanamura started in on the translation of the Farmer-District Cooperative Agreement.

—ROBERT E. SWANSON.

GOOD NEIGHBORS ON GOOD LAND.—The following is an excerpt from correspondence from the work unit conservationist at Fairbanks, Alaska:

"Saturday evening, November 17, I attended the combined veterans-on-the-farm training class and supervisors meeting in the Salcha-Big Delta Subdistrict. The weather was 20° below zero and the meeting was held around a bonfire, as they were in the process of closing in their new community schoolhouse, and the chimney had not been installed for a stove. There were no long speeches and even the short ones were without gestures."

As background to this, the school building is being constructed by homesteaders in the district, many of whom are taking advantage of the veterans training program. The logs are cut from the homesteads and labor is donated. They hope by providing a building that the Territory will be able to provide teachers for a grade school.

During weather suitable for land clearing, these people work on the land. When winter closed in on them, they turned to bettering their social condition by developing this community center.

It takes a lot of courage to build a community under the conditions such as these people face. It also takes a lot to discourage people who have the true pioneer spirit.

Among the items of business transacted at this meeting was a request to the Alaska Soil Conservation District and the Soil Conservation Service to extend the land-capability survey started last season, and for access roads into the areas found by that survey to be suitable for agricultural use. These people want neighbors, good neighbors, on good land.

—CHARLES W. WILSON.

Raymond C. Firestone demonstrates the planter for O. C. Diller, State forester; Howard Call, chairman of the Summit County Soil Conservation District; and Clay Stackhouse, national vice president of the National Association of Soil Conservation Districts.

TO SPEED THE PLANTING.—Supervisors of the Summit (Ohio) Soil Conservation District are in the tree-planting business now—thanks to Raymond Firestone, vice president of the Firestone Tire and Rubber Co. Firestone recently donated a modern tree planter to help speed up tree planting on district farms.

On his own 110-acre farm in Bath Township this leading industrialist is constructing diversions and grass waterways, and reseeding meadows. With his application for a conservation farm plan, he sent along $25 for an affiliate membership in the National Association of Soil Conservation Districts.

Supervisors Howard Call, Donald Barlow, Lee Gamauf, William Himelrigh, and Roger Ewart accepted the gift at an Arbor Day program last April, in connection with a demonstration on the V. D. Kniss farm in Richfield Township.

The Summit district has several thousand acres of idle land which needs to go back to tree production. The problem heretofore has been the scarcity and cost of labor. The tree planter will cut down greatly the amount of time and work required.

The board of supervisors has established a replacement and repair charge of $5 per thousand for planting trees or multiflora rose, with a maximum of $25 per day.

Douglas Guin, of Richfield, with a helper planted 2,000 trees in 75 minutes. Van Carter, of Tallmadge, planted over 10,000 multiflora rose plants in 8 hours. The planting takes two men, one to drive the tractor and another to ride the planter.

The planter does an excellent job. It firms the soil around the roots better than can be done by hand. It will be used to plant about 15,000 trees and 20,000 rose plants this year. And in 1953 and thereafter it is expected to be in far greater demand. It became available too late this year for cooperators to obtain sufficient planting stock.

A FAMILY ENTERPRISE.—In Worcester County, Mass., is to be found one of the country's finest examples of effective teamwork on the land. Here, working harmoniously and to a single purpose, are the Extension Service, the Soil Conservation Service, the three soil conservation districts, Production and Marketing Administration, Farmers Home Administration, and other agencies concerned with agriculture in its various phases.

Outstanding evidence of the kind of cooperation prevailing was a recent special issue of the *Worcester County Farmer*, a regular publication of the Extension Service. A typographically attractive, slick-paper, 24-pager with sturdy local advertising support, this issue was developed at the suggestion of Charles W. Turner, the county agricultural agent. Turner offered the three districts and the Soil Conservation Service as much space as they wanted to tell their own story of 5 years' accomplishments, and it took 12 pages of text and pictures to do it. The issue was sent to 6,000 farmers in Worcester County. Gardner C. Norcross, associate county agricultural agent, at the request of the districts and the Service, wrote the leading editorial, "We've Made Conservation Work."

In Worcester County, for quite a long time, the county agent and the SCS work group have been housed together in one big room. This has made their work more pleasant and also more effective.

TREES FIGHT WIND.—Shelterbelts have done much to halt wind erosion on the sandy soil of Gwilym Covell's 320-acre farm. They have also had a big part in conserving moisture and boosting crop yields. Gwilym Covell lives near Heaton, N. Dak., in the Wells County Soil Conservation District.

His shelterbelts border the farm on the north and west. Narrower strips of trees, known as buffers, extend east to west nearly midway between the north and south borders of each quarter section. The district helped obtain the trees and provided planting equipment, and PMA aided through conservation payments.

"We are reaping the benefits now," Covell said. "There are many things besides control of erosion and increased production. There is no more snow drifting into the farmyard. The trees supply an abundance of fruit for home use, and they provide nesting places and food for a large number of birds."